WiMAX Mobile Router

User Manual

Biscuit

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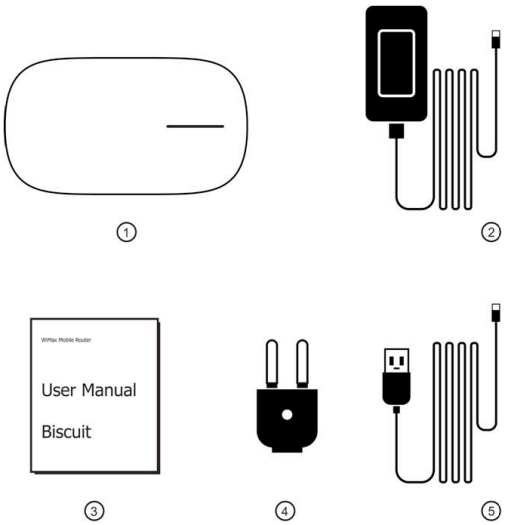
1. Attention

- Keep away from high humidity.
- Use in a clean place.
- Place on a stable platform to avoid dropping.
- Don’t keep around electromagnetic waves.
- Don’t place on heavy things.
- Don’t expose to direct sunlight.
- Don’t throw to avoid breakage.
- Don’t place on hot objects.
- Keep away from pets and children.
- Keep away from water.
- Don’t hold power adaptor with wet hands.

2. Introduction

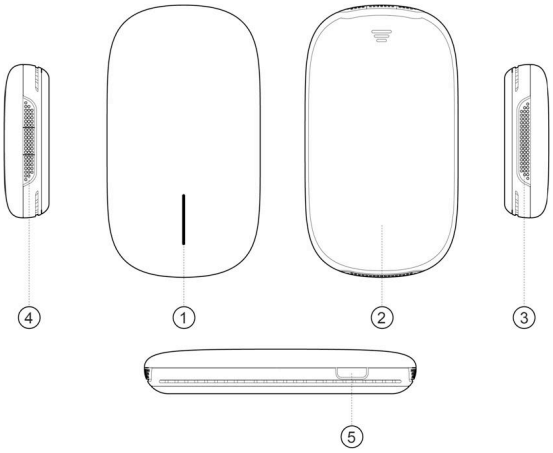
Components List in the package:

1. Main unit;
2. Charger [5V/2A]
3. User’s Manual
4. Plug
5. USB Cable
6. Pouch



Specification

	Items	Description
WiMAX	WiMAX Standard Compliance	IEEE 802.16e-2005
	Air Interface	Internal Antenna(0dBi)
	Max output Power	23dBm
WiFi	Network Standard	IEEE 802.11 b/g
	Frequency/Channels	2.4GHz/12Ch.
Power	Battery	Built-in Li-Polymer(3.7V/2700mA)
	Adaptor	5V / 2A
Dimension / Weight		110mm×64mm×18mm / 120g



⊖ Status LED : WiMAX signal status and WiFi status LED
(Color : Blue / Yellow / Green / Red)
⊜ Battery Cover
⊛ Ventilation Hole
④ USB Port : Battery charging and Tethered operation
⑤ Power button and Battery Status : Power turn On/Off and battery status

LED indication
WiMAX Signal LED

LED Off	Power Off
Yellow LED On and Off	Frequency scanning or ready
Red LED On and Off	Connecting with WiMAX network
Red LED On	WiMAX signal level 1
Yellow LED On	WiMAX signal level 2 ~ 3
Green LED On	WiMAX signal level 4 ~ 5

WiFi LED

WiFi AP On	Blue color

Power LED

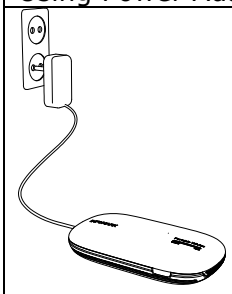
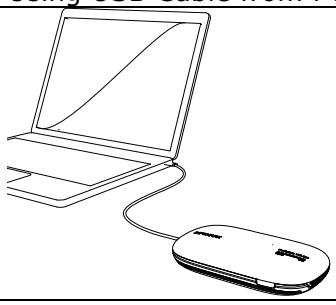
Battery status (100% ~ 60%)	Green color
Battery status (60% ~ 30%)	Yellow color
Battery status (30% ~ 0%)	Red color
Battery charging	Red color
Battery full charged	Green color

3. How to use Device

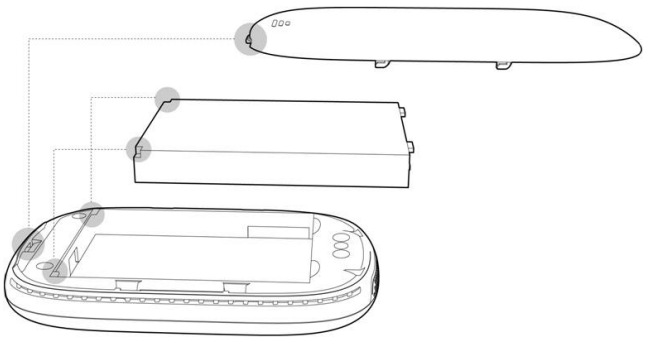
Power ON/OFF

Power ON : Push and hold power button until WiMAX LED turn on
Power OFF : Push and hold power button for 5 seconds and release power button
Factory Reset: Push and hold power button for 15 seconds

How to charge battery

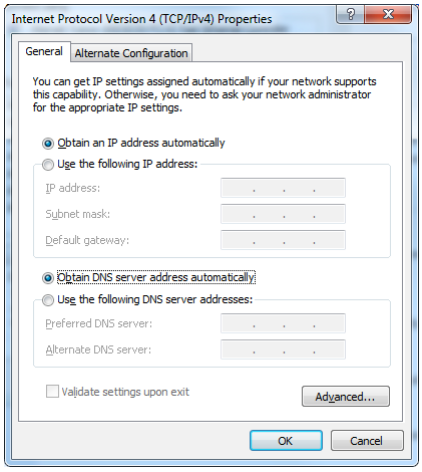
Using Power Adaptor	Using USB Cable from PC
	

How to insert Battery in device



Setting of the WiFi AP

Notice : Configuration of WiFi AP has to be set to "Obtain IP address and DNS server address automatically".


Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel

Settings of USB (RNDIS)

Notice :
1. Over WiFi
Your PC is connected to web server of MOBILE ROUTER through WiFi.
RNDIS driver can be downloaded from web UI page of MOBILE ROUTER.
2. Over USB Cable
RNDIS driver can be installed into your PC over USB cable.

Settings with Window XP

1. MOBILE ROUTER should be connected with PC by USB cable.
2. Below are the RNDIS installation steps

Hardware Update Wizard
Welcome to the Hardware Update Wizard
Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission).
Read our privacy policy
Can Windows connect to Windows Update to search for software?
Yes, this time only
Yes, now and every time I connect a device
No, not this time
Click Next to continue.
< Back
Next >
Cancel

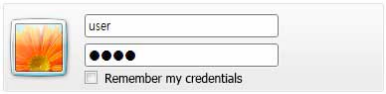
[Additional function - "CD-ROM"mode and "RNDIS" mode]
This function is very useful where the PC has no in-built WiFi interface.
The MOBILE ROUTER's default is "CD-ROM" mode and the default setting can be changed For "RNDIS" mode when pushing power button 3 times within 3 second and LED will flash yellow color three times.

4. Configuring Device

Connect to Web User Interface (Web Connection Manager)
Start Web User Interface
- Use web browser to connect Web User Interface
- Type Address 192.168.1.1

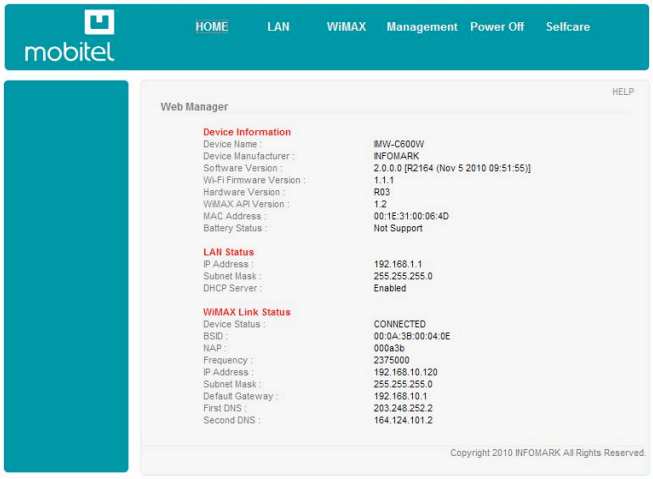
Input ID/Password
- A Pop-up window will request for specific ID and Password to enter into Web CM

ID : user / Password : user



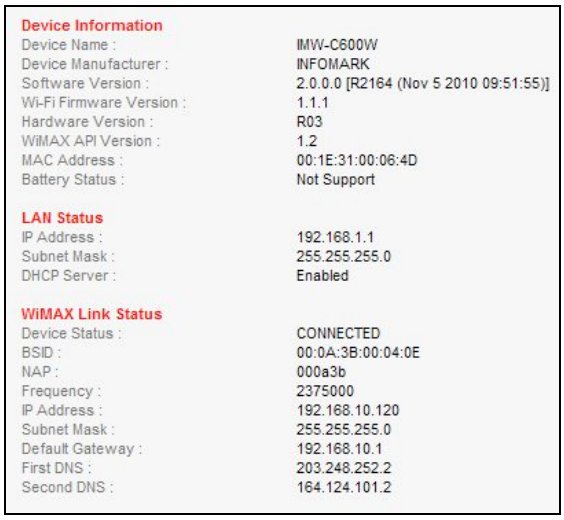
* User password can be modified. Please see Management section

- Home of Web UI



Main Menu bar: User can choose settings of LAN, WiMAX, Management and Power off

Home


Device Information
Device Name : IMW-C600W
Device Manufacturer : INFOMARK
Software Version : 2.0.0.0 [R2164 (Nov 5 2010 09:51:55)]
Wi-Fi Firmware Version : 1.1.1
Hardware Version : R03
WiMAX API Version : 1.2
MAC Address : 00:1E:31:00:06:4D
Battery Status : Not Support
LAN Status
IP Address : 192.168.1.1
Subnet Mask : 255.255.255.0
DHCP Server : Enabled
WiMAX Link Status
Device Status : CONNECTED
BSID : 00:0A:3B:00:04:0E
NAP : 000a3b
Frequency : 2375000
IP Address : 192.168.10.120
Subnet Mask : 255.255.255.0
Default Gateway : 192.168.10.1
First DNS : 203.248.252.2
Second DNS : 164.124.101.2

- Device Information

It shows description of Device such as name of device, manufacturer, software version, hardware version, API version and MAC address

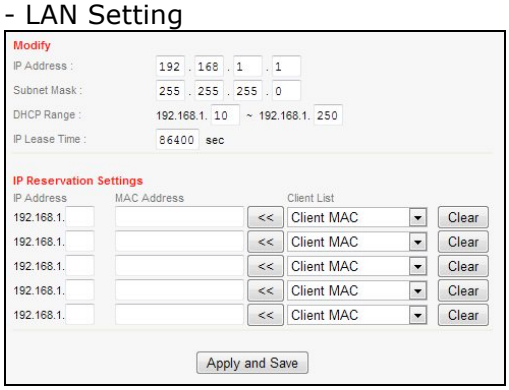
- LAN Status
It shows IP Address, Subnet Mask and setting of DHCP Server

- WiMAX status information
It shows connection status of WiMAX and Network

LAN

- LAN Status
It shows web address of local area network information.

- LAN Setting

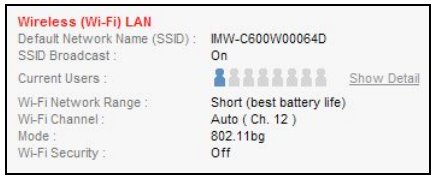

Modify
IP Address : 192 . 168 . 1 . 1
Subnet Mask : 255 . 255 . 255 . 0
DHCP Range : 192.168.1. 10 ~ 192.168.1. 250
IP Lease Time : 86400 sec
IP Reservation Settings
IP Address MAC Address Client List
192.168.1. << Client MAC Clear
192.168.1. << Client MAC Clear
192.168.1. << Client MAC Clear
192.168.1. << Client MAC Clear
192.168.1. << Client MAC Clear
Apply and Save

Modify:
Input desired IP address and subnet mask that user wants to use for Local Area Network

Attached Device
This shows device and MAC Address is currently attached to biscuit

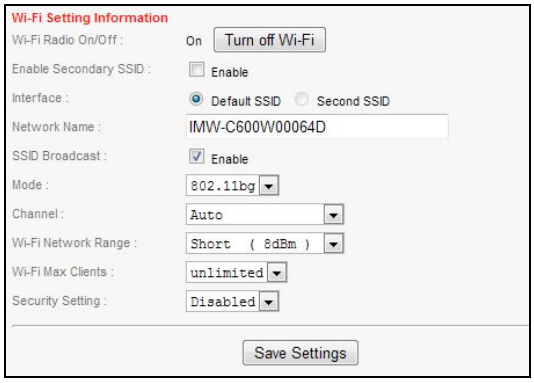
IP Reservation Settings
It is to assign IP address of device with MAC address

- WiFi Status


Wireless (Wi-Fi) LAN
Default Network Name (SSID) : IMW-C600W00064D
SSID Broadcast : On
Current Users : Show Detail
Wi-Fi Network Range : Short (best battery life)
Wi-Fi Channel : Auto (Ch. 12)
Mode : 802.11bg
Wi-Fi Security : Off

It shows Wi-Fi's Status information

- WiFi Setting



Wi-Fi Setting Information
User can turn off Wi-Fi when USB mode is used. Please do not turn off Wi-Fi when it is the only communication method.

Enable Second SSID
The portable router provides two SSID at a time. When check box is enabled, user can name second SSDI.

Network Name:
Network Name is identical to SSID, where the client device receives this broadcasted SSID from their access points The device comes with SSID of 'KWI-B2200'. This SSID can be changed as preferred.

SSID Broadcast:
SSID of device cannot be broadcasted by this option

Mode:
User can choose 802.11b, 802.11g or both 802.11b/g as desired

Channel:
User can choose Wi-Fi channel as desired

Wi-Fi Network Range
User can choose Wi-Fi Range as desired.

Wi-Fi Max Clients
User can choose number of client device as desired.

Security Setting:
Default setting of Security is 'Disabled'. If changed, 'Save Setting' button should be clicked.

WEP (Wired Equivalent Privacy):
This Device provides 64/128 bit encryption for network protection.

Authentication type: In case of selecting WEP, default setting is 'Auto'.
▸ Auto : This supports both open system and shared key.
▸ Open System: Open system allows link to all clients and permits communication to clients that have same WEP key.
▸ Shared Key: Shared Key allows link and communication to clients that have identical shared key as AP.
- Key Length: For user convenience, select 64bit or 128 bit encryption.

- Key Pass Phrase: WEP Key is generated automatically. Input random character to generate key. Please make a separate note of the key in order to connect to the device.

WPA

This Device provides WPA, WPA2 and also supports both at the same time

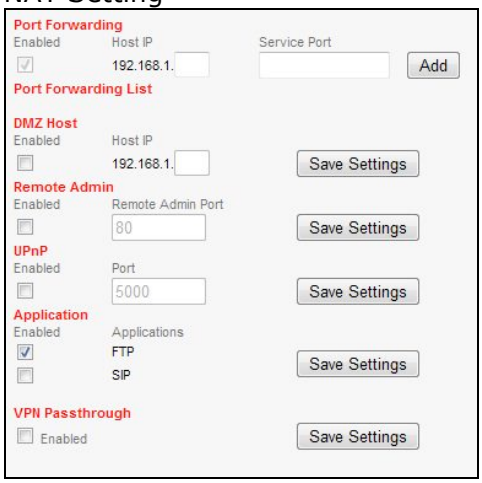
▸ WPA(Wi-Fi Protected Access) : WPA protocol implements the majority of the IEEE 802.11i standard. WPA is based on TKIP(Temporal Key Integrity Protocol) and it provides higher security of wireless communication.

▸ WPA2 : AES(Advanced Encryption Standard) use additional encryption algorithm and it comply with WAP.

▸ Use Both: It provides both WPA and WPA2 and it is default value when selecting WPA.

- Encryption: It is to encrypt Unicast packets and support Auto, TKIP, AES-CCMP. Default is Auto.
- Key Pass Phrase: Input WPA key value to blank and click 'Save settings'

NAT Setting



Port forwarding setting:

Port forwarding is the practice of forwarding a TCP/IP packet in a network address translator gateway to a predetermined network port on a host within a masqueraded, typically private network based on the port number on which it was received from the originating host. The technique is used to permit communications by external hosts with services provided within a private local area network.

Port Forwarding List:

When this option is enabled, user can use DMZ function with specific IP address. Please input Host IP address which is desire to be used for DMZ IP address

DMZ Host :

When this option is enabled, user can use DMZ function with specific IP address. Please input the preferred Host IP address.

Remote Admin :

When this option is enabled, user can designate specific Remote Administration Port for security purpose

Application

This enables FTP and SIP.

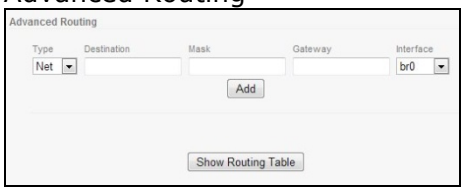
VPN Pass-through
This enables VPN Pass-through function

CPE Mode
User can change the NAT mode or Bridge mode

Access Restrictions

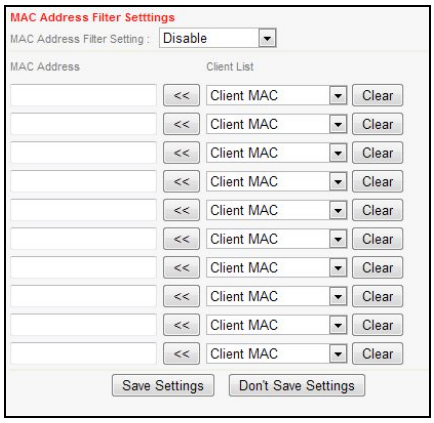
Some IP address range can be blocked by protocol/port.

Advanced Routing



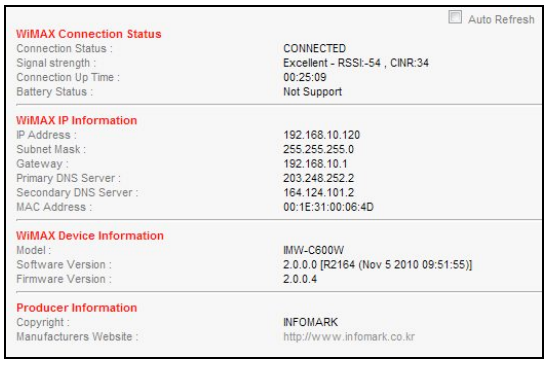
Dynamic routing setting.

MAC Filter



When this option is on, user can either Deny or Allow connected MAC address. MAC address can be selected from client's list.

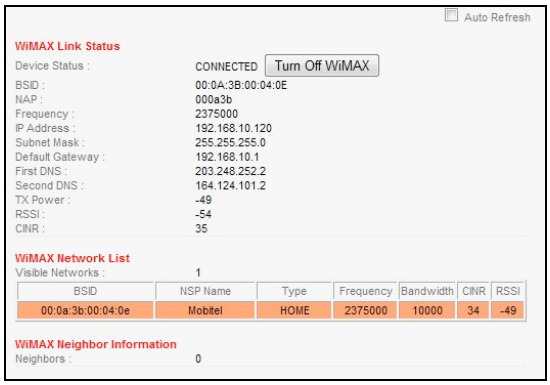
WiMAX Connection Info.


Auto Refresh
WiMAX Connection Status
Connection Status : CONNECTED
Signal strength : Excellent - RSSI:-54 , CINR:34
Connection Up Time : 00:25:09
Battery Status : Not Support
WiMAX IP Information
IP Address : 192.168.10.120
Subnet Mask : 255.255.255.0
Gateway : 192.168.10.1
Primary DNS Server : 203.248.252.2
Secondary DNS Server : 164.124.101.2
MAC Address : 00:1E:31:00:06:4D
WiMAX Device Information
Model : IMW-C600W
Software Version : 2.0.0.0 [R2164 (Nov 5 2010 09:51:55)]
Firmware Version : 2.0.0.4
Producer Information
Copyright : INFOMARK
Manufacturers Website : http://www.infomark.co.kr

This page shows WiMAX connection status

Auto Refresh: When check box is enabled, Network and MAC status of device is monitored in real time.

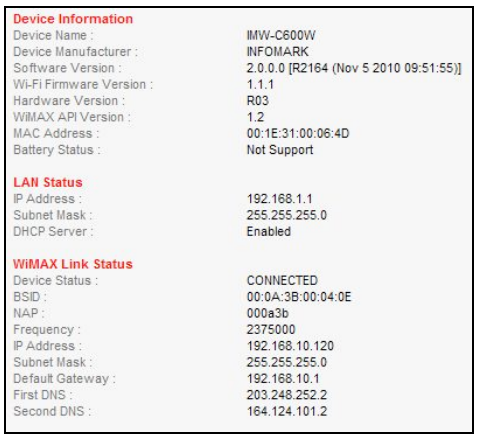
Network Info.


Auto Refresh
WiMAX Link Status
Device Status : CONNECTED Turn Off WiMAX
BSID : 00:0A:3B:00:04:0E
NAP : 000a3b
Frequency : 2375000
IP Address : 192.168.10.120
Subnet Mask : 255.255.255.0
Default Gateway : 192.168.10.1
First DNS : 203.248.252.2
Second DNS : 164.124.101.2
TX Power : -49
RSSI : -54
CINR : 35
WiMAX Network List
Visible Networks : 1
BSID NSP Name Type Frequency Bandwidth CINR RSSI
00:0a:3b:00:04:0e Mobitel HOME 2375000 10000 34 -49
WiMAX Neighbor Information
Neighbors : 0

This page shows WiMAX link status and Neighbor information of BS
Auto Refresh : When check box is enabled, Network and MAC status of device is monitored in real time.

Management

Status

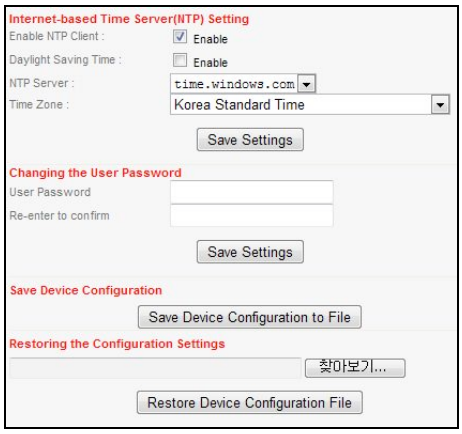

Device Information
Device Name : IMW-C600W
Device Manufacturer : INFOMARK
Software Version : 2.0.0.0 [R2164 (Nov 5 2010 09:51:55)]
Wi-Fi Firmware Version : 1.1.1
Hardware Version : R03
WiMAX API Version : 1.2
MAC Address : 00:1E:31:00:06:4D
Battery Status : Not Support
LAN Status
IP Address : 192.168.1.1
Subnet Mask : 255.255.255.0
DHCP Server : Enabled
WiMAX Link Status
Device Status : CONNECTED
BSID : 00:0A:3B:00:04:0E
NAP : 000a3b
Frequency : 2375000
IP Address : 192.168.10.120
Subnet Mask : 255.255.255.0
Default Gateway : 192.168.10.1
First DNS : 203.248.252.2
Second DNS : 164.124.101.2

This page can be seen when you enter into web UI.

Firmware information

This page shows software and firmware version

Administration



Internet-based Time Server (NTP) Setting
This option enables Network Time Protocol for this Personal Hotspot to acquire current time from time server.
Default setting of time server is [time.windows.com] If this time server is not working, please try time.nist.gov, time-nw.nist.gov, time-nw.nist.gov, time-a.nist.gov or time-b.nist.gov
Please select your Time Zone where this Hotspot is being used

Changing the User Password
User can change password of web UI as desired.

Save Device Configuration
This is to save current setting of device and this can be restored when device is turned into factory default settings.

Restoring the Configuration Settings
This is to restore saved configuration file.

Upgrade

Factory Reset
The device can be restored to factory default with this option

Firmware Upgrade
If there is updated firmware from operator, this will help to update firmware of the device. Find the target firmware and click update. This process will take a few minutes.

FOTA URL
If there is URL provided from operator, this will automatically compare the firmware version and execute update.

RNDIS

Driver Download

Users requiring the USB driver for windows XP/Vista/Win7 operating systems may use this button to download the appropriate software.

Wi-Fi turn off
This option allows the user to disable Wi-Fi connectivity when USB data mode is enabled.

Power off
This button will make the device turn off without touching physical power button.